

Wildlife Services Directive

2.627

November 29, 2017

PYROTECHNICS

1. PURPOSE

To establish procedures and accountability for the safe and secure handling and use of explosive pest control devices (pyrotechnics) for WS employees, and to ensure that applicable laws, regulations and policies are observed.

2. REPLACEMENT HIGHLIGHTS

This directive replaces, in part, WS Directive 2.625 dated February 24, 2011.

3. AUTHORITY

Authority to promulgate a policy addressing use of pyrotechnics in Wildlife Services activities is pursuant to The Act of March 2, 1931 (7 USC 8351-8352, as amended).

4. POLICY

a. WS personnel are authorized to use commercially available explosive pest control devices (EPCD) and certain pyrotechnics covered by this directive on official WS projects as directed by their State Director or NWRC Field Station Leader.

b. WS use, storage and transportation of explosives will be in compliance with applicable federal, state and local laws and regulations and WS standards (Attachment 1).

c. Accidents, theft or loss

- (1) Any WS employee with knowledge of the theft or loss of explosive material must notify his/her supervisor and within 24 hours of discovery, the theft or loss must be reported to ATF by calling 1-888-283-2662 (nationwide toll free number). ATF Form 5400.5 will be immediately completed and mailed or faxed to the nearest ATF office along with any invoices and additional

information (ATF: Explosives Law and Regulations, ATF P 5400.7, Subpart C, 555.30).

- (2) Additionally, any suspicious or unusual activity or attempted theft of explosive materials as well as break-ins or attempted break-ins to buildings where explosive materials are stored will be reported in a timely manner to state and local law enforcement authorities, the Deputy Administrator, the State Director or NWRC Project Leader, Regional Director, and the WS Explosives Safety Committee through the Committee Chair.
- (3) All accidents must be reported to the State Director or NWRC Project Leader, Regional Director, APHIS Safety, Health, and Environmental Protection Branch, and the Explosives Safety Committee Chair immediately.

5. BACKGROUND

a. Pest control pyrotechnics are an effective, non-lethal wildlife damage management tool for dispersing wild animals when they damage agriculture, property, or threaten public safety or health. Pyrotechnics may contain regulated explosive materials requiring specific safety, security, storage, transportation and records maintenance procedures.

6. DEFINITIONS

a. Explosive Pest Control Devices (EPCD): Commercially available explosives used in the field of animal or pest management to minimize crop damage or interference from birds, and mammals at airports, landfills, farmland, golf courses, fishing areas or other areas of concern. Other terms are: "bird bombs", "screamers", "bangers", "shell crackers", "CAPA", or similar terms.

b. Pyrotechnics: Any combustible or explosive compositions or manufactured articles designed and prepared for the purpose of producing audible or visible effects which commonly include EPCDs and commercial fireworks.

c. Launcher: A device used to shoot pyrotechnics.

7. IMPLEMENTATION

a. Explosive materials will be stored and transported in accordance with the procedures provided in the Standard for Storage and Transportation of Pyrotechnics (Attachment 1).

b. Employees assigned to use pyrotechnic (EPCDs) launching devices will receive safety training in their use as per firearms directive 2.615, and will be issued the "Protect Yourself: Pest Control Pyrotechnics" OSHA Quick Card.

c. Employees using pyrotechnics must wear appropriate personal protective equipment, i.e., hearing and eye protection as identified in the job hazard assessment for pyrotechnic use (See APHIS Safety and Health Manual (6/30/04), Chapter 11, Section 1, Personal Protective Equipment).

d. WS offices and personnel will provide information on the safe use of pyrotechnics and their launching devices to private individuals, outside organizations and agencies, and businesses to whom WS distributes pyrotechnics for wildlife conflict resolution, e.g., OSHA/WS "Quick Card" information card. Employees distributing pyrotechnics must follow applicable ATF regulations.

e. Accountability for hazardous materials subject to this directive will be in accordance with the Standard for Storage and Transportation of Pyrotechnics (Attachment 1).

8. APPLICABILITY

This Directive applies to all WS programs.

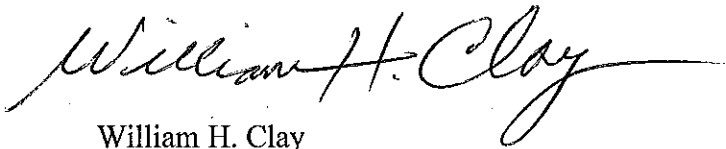
9. REFERENCES

- a. Federal Explosives Law and Regulations, ATF P 5400.7; http://www.atf.gov/pub/fire-explo_pub/explo_law_reg.htm.
- b. Title 27, Code of Federal Regulations, Part 555, Commerce in Explosives.
- c. Title 29, Code of Federal Regulations, Part 1910.109, Explosives and Blasting Agents.
- d. Title 29, Code of Federal Regulations, Part 1910, Subpart I, Personal Protective Equipment.
- e. Title 49, Code of Federal Regulations, Part 173, Shippers-General Requirements for Shipments and Packaging.
- f. Title 49, Code of Federal Regulations, Part 177, Carriage by Public Highway.
- g. Title 18, U.S. Code, Chapter 40, Section 842, Unlawful Acts.
- h. APHIS Safety and Health Manual (Revised 6/30/04).

- i. WS Directive 2.615, Firearms Use and Safety (11/24/09).
- j. WS Directive 2.435, Explosives Use and Safety (07/03/09).
- k. WS Explosives Safety Manual.
- l. Institute of Makers of Explosives Safety Library Publication No.22.;
http://www.ime.org/ecommerce/products.php?category_id=13
- m. American Table of Distances for Storage of Explosives;
<https://www.atf.gov/content/explosives/explosives-industry/table-of-distances>
- n. OSHA Quick Card "Protect Yourself: Pest Control Pyrotechnics"

10. ATTACHMENTS/ENCLOSURES

Attachment (1): Standard for Storage and Transportation of Pyrotechnics



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Attachment 1

STANDARD FOR STORAGE AND TRANSPORTATION OF PYROTECHNICS

WILDLIFE SERVICES

This standard applies to the storage, transportation, and use of pyrotechnics by Wildlife Services (WS) personnel. The standard is based on Federal laws and regulations pertaining to explosive materials, Federal and industry standards for explosives safety and security, and applicable Agency directives. The requirements and rules that follow will help WS ensure safe, secure and legally compliant storage and transportation for the explosive materials covered by these procedures. A variance request can be made through the Explosives Safety Committee.

I. PYROTECHNICS

Pyrotechnics authorized for storage, transportation, and use by WS personnel are restricted to commercially available "explosive pest control devices" and certain pyrotechnics classified by the U.S. Department of Transportation (DOT) as Division 1.4 explosives. Division 1.4 explosives are those packaged and shipped to prevent mass detonation of container contents. Approved pyrotechnics packaged as Division 1.4 include, but are not limited to, the 15mm bird banger and screamer siren cartridges, 12 gauge shell crackers, 18.2mm CAPA long-range cartridges and commercial fireworks commonly used by WS.

A. Overnight Storage

Rule 1: Never store pyrotechnics or any other explosive material in a residence.

Rule 2: All pyrotechnics will be stored in accordance with ATF and OSHA regulations (ATF: Law and Regulations, ATF P 5400.7 and 29 CFR, Part 1910.109) and State and local requirements or in accordance with the temporary overnight vehicle storage variance in section B.

Rule 3: Magazines approved for overnight storage of pyrotechnics will meet one of the following descriptions:

- a. An outdoor magazine meeting ATF Type 1 magazine standards (Federal Explosives Law and Regulations, ATF 5400.7, Subpart K, 555.207) or ATF Type 2 outdoor magazine standards (ATF 5400.7, Subpart K, 555.208(a)). Type 2 outdoor magazines will meet ATF regulations to discourage theft, have metal floors, and be securely anchored to a concrete slab or to substantial ground anchors.

b. An indoor magazine that meets ATF Type 2 or ATF Type 4 indoor magazine standards. See ATF 5400.7, Subpart K, 555.208(b) and 555.210 for construction and lock requirements. The IME-22 container (IME Safety Library Publication No. 22, Part 2, paragraph B and Appendix C) exceeds these standards and can be used as an indoor storage magazine for Division 1.4 pyrotechnics. Indoor magazines must be locked and kept in a locked building in accordance with ATF 5400.7, Subpart K. Indoor magazines must be painted red and have in 3" high white lettering "EXPLOSIVES – KEEP FIRE AWAY" on the front, top, and all sides. Each indoor magazine must be provided with substantial wheels or casters (unattached, flat 4-wheel furniture-type dollies are recommended).

Rule 4: Pyrotechnics may be stored with other explosives components with the exception of detonators. Pyrotechnics should be maintained in the manufacturer's container when not in use.

Rule 5: The quantity of any explosive materials stored in an indoor magazine must not exceed 50 lbs. per magazine or 50 lbs. per building when explosive materials are stored in more than one indoor magazine in the same building.

For example, the average weight of the total pyrotechnic composition in 15mm bird banger and screamer siren cartridges is 4 grams per cartridge. Therefore, the maximum number of 15 mm bird banger and/or screamer siren cartridges that can be stored in a single indoor magazine or building is 5,600 cartridges as long as no other explosive materials are present. The average explosives weight for cracker shells is 2 grams per cartridge; therefore, 11,000 cracker shells equal 50 pounds of explosive material. Since CAPA long-range cartridges (18.2mm) contain an average total explosives weight of 5.73 grams, a total of 3,900 CAPA cartridges contain 50 pounds of explosive material. Any combination of pyrotechnic devices containing a total of not more than 50 pounds of explosive material can be stored together in a single magazine, or when multiple magazines are used, in a single building.

The storage of up to 300,000 pounds of explosive material is permitted in ATF Type 1 or Type 2 outdoor magazines. The American Table of Distances for Storage of Explosives (ATF5400.7, Subpart K, 555.218) applies to explosive materials stored in outdoor magazines. This table provides mandatory separation distances between explosives magazines and inhabited buildings, public highways, and railways.

Rule 6: Smoking, matches, open flame, or spark producing devices are not permitted within 50 feet of explosives magazines. Persons approaching magazines must be warned verbally or by warning signs posted at appropriate locations. Combustible materials and flammable liquids will not be stored within 50 feet of magazines. The land surrounding a magazine location will be kept clear of all combustible materials for a distance of at least 25 feet.

Rule 7: The appropriate Safety Data Sheet(s) (SDS) will be kept with the magazine.

Rule 8: Each magazine, their contents, and required inventory records will be in the charge of a designated employee who is responsible for enforcing safety precautions, security, inspections and inventory records and reporting requirements.

Rule 9: Access to explosive materials by unauthorized persons will be restricted by keeping magazines locked when not adding or removing explosive materials from them and by providing proper security to magazine keys. Prohibited persons as defined in 18 USC 842(d) and 842(i), may not lawfully transport, ship, receive or possess explosives.

B. Temporary Overnight Vehicle Storage

When necessary, pyrotechnics and their launch components may be stored overnight in a locked vehicle under the following conditions:

Rule 1: Overnight storage of pyrotechnics in a vehicle is authorized only when they are "in use" on an assigned project, and it is not practical to return them to magazine storage as described above in Section I (A) Overnight Storage. State Directors and NWRC Field Station Leaders are authorized to extend overnight vehicle storage beyond 14 days on a case-by-case basis when necessary to meet program objectives. Permanent overnight storage of pyrotechnics in a vehicle is prohibited.

Rule 2: No more pyrotechnic cartridges than necessary to complete an assigned project may be stored overnight per vehicle.

Rule 3: Pyrotechnics temporarily stored in this manner will be locked inside an IME-22 or other secure container containing no explosive detonators. At a minimum, this container will consist of a metal exterior and an interior surface of non-sparking material. No screw heads or other metal surfaces will be exposed in the interior. The container lid must overlap the sides by at least 1 inch.

Rule 4: For overnight vehicle storage, pyrotechnics must be: 1) stored in a locked container, as described in Rule 3 of this section, which is placed out of sight inside a locked vehicle, affixed camper shell, or truck box; or 2) in a locked, IME 22 container securely affixed to the bed of a truck.

C. Transportation

Rule 1: During transportation over public roadways, pyrotechnics will be locked in a secure container as described above in Section B. Temporary Overnight Vehicle Storage, Rule 3. If IME-22 containers are used for transportation they will be secured to the vehicle during transit to prevent theft or a safety hazard in the event of an accident and be covered by a tarpaulin or other waterproof covering during inclement weather.

Rule 2: Explosive detonators must not be transported in the same container with pyrotechnics.

Rule 3: Each vehicle used to transport pyrotechnics will be equipped with two fire extinguishers having a rating of at least 4-A: 40-B:C.

II. RECORD KEEPING AND REPORTING

Inventory and purchase records for pyrotechnics will be maintained at the State Office/NWRC Field Station level for a minimum of 5 years unless State or local authorities require a longer retention period. These records are subject to examination by ATF and periodic internal review to ensure accountability, completeness and accuracy.

A running inventory of pyrotechnics will be maintained by the designated employee at each magazine location. A quarterly physical inventory will be conducted and recorded in the Control Materials Inventory Tracking System (CMITS) in accordance with WS Directive 2.465. Inventory information will include the number of pyrotechnics received from the distributor, date of manufacture (date code information on package if provided), the number removed, used, destroyed, returned to the magazine, or transferred to another WS location.

III. MAGAZINE INSPECTIONS

Each magazine site where explosive materials are stored will be inspected at least every 7 days and documented. This weekly inspection need not be an inventory, but must be sufficient to determine whether unauthorized entry or theft of explosive materials has occurred. Safety inspections of explosives magazine sites will be conducted and documented a minimum of twice annually on APHIS Form 256-5, APHIS Safety Inspection Checklist for explosive materials stored in magazines located at government owned and leased facilities. WS Form 39, WS Self-Inspection Checklist-Residential Storage Sites for Pesticides, Pyrotechnics, Rocket Net Charges, and/or Incidental Explosive Materials, will be used for magazines stored at an employee's place of residence. Upon inspection completion, inspection forms will be forwarded to the State program or NWRC Field Station designated official.